



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

aw

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,208	01/02/2002	Warren J. Warwick	39340.1.1.3	8599
22859	7590	10/08/2003	EXAMINER	
INTELLECTUAL PROPERTY GROUP			THANH, QUANG D	
FREDRIKSON & BYRON, P.A.			ART UNIT	
4000 PILLSBURY CENTER			PAPER NUMBER	
200 SOUTH SIXTH STREET			3764	
MINNEAPOLIS, MN 55402			DATE MAILED: 10/08/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	10/038,208	Applicant(s)	WARWICK ET AL.
Examiner	Quang D. Thanh	Art Unit	3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 10 July 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) 4,9,14,17 and 20 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on 10 July 2003 is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed 07/10/2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it does not provide the publication date for the reference. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a) because in fig. 2, there are two separate views of the same thing and as such it should be labeled separately as 2(a) and 2(b). The specification should also include descriptions of figs. 2 (a) and 2 (b) and appropriate correction on pages 9-10 should be made accordingly. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claims 4 and 14 are objected to because of the following informalities: "a motor-driven rotating blade" has already been recited in claims 1 and 13 and therefore it is not clear if this rotating blade is the same or another additional blade. And since both "a mechanism" (claim 1) and "a pulse frequency control component" (claim 4) comprising a motor-driven rotating blade, it is unclear if these structure are the same or different.

4. Claims 9, 17 and 20 are objected to because the limitation "the valve" lacks antecedent basis. Appropriate correction is required.

***Double Patenting***

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101, which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 1-20 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 13-32 of copending Application No. 10/030,447. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Brunt (6,030,353) in view of Whitney (3,462,778) and Meridith et al. (3,307,533).

9. Re claims 1 and 11, Van Brunt discloses a chest compression apparatus (fig. 1) comprising: a mechanism comprising a bladder 2 for receiving pressurized air, a mechanism comprising a valve 30 (col. 5, lines 36-47) adapted to interrupt periodically the air stream for supplying substantially sinusoidal wave form air pressure pulses (col. 5, lines 4-7) to the bladder. Although Van Brunt does not disclose that the valve is a motor-driven rotating blade, the reference suggests that any suitable types of valves can be used in order to provide a continuously variable range of air flow restriction between the fully close and open positions (col. 5, lines 35-47). Moreover, Whitney teaches in figs. 2-4 a motor-driven valve 31 having a rotating blade 53 that is capable of interrupt periodically the air stream (col. 4, lines 46-71) for supplying substantially sinusoidal air pressure pulses (fig. 5 shows sinusoidal wave form air pressure pulses). Additionally, Meridith teaches an apparatus for generating and controlling pressure, the apparatus comprising a motor-driven rotating disk 31 for producing a succession of pressure pulses that can be transmitted to a plurality of bladders causing these bladders

to inflate and deflate (col. 4, lines 20-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the device in the Van Brunt's reference, to select a valve having rotating blade, as suggested by Whitney and Meridith, as a suitable valve for the purpose of providing a continuously variable range of air flow restriction between the fully close and open positions (Van Brunt, col.5, lines 35-47), providing a pulsating pressure (Meridith, col. 4, lines 20-59), and especially for supplying substantially sinusoidal air pressure pulses therapeutically desirable for mucous mobilization ( Van Brunt, col. 5, lines 4-6).

10. Re claims 2, 10 and 12, Van Brunt appears to be silent with regard to how the air is exhausted from the vest. Whitney completes the Van Brunt's disclosure by providing the details of venting the bladder as the rotating blade 53 alternately aligns the bladder with positive pressure inlet and exhaust to atmosphere outlet. Such would have been an obvious provision in Van Blunt.

11. Re claims 3-5, 8-9, 13-15 and 18 , Van Brunt further discloses an air flow generator component 6 , a pulse frequency control component 44 in communication with the air flow generator (fig. 1), a pressure control component 24 in communication with the frequency control component (col. 5, lines 1-13), a patient vest 4 (fig. 1), wherein both pulse frequency control and pressure control components can be used by the patient or preset by the physician so as to deliver sinusoidal wave form compression pulses (col. 3, lines 8-18); the apparatus provides a maximum pressure of about 60 mm Hg or less (col. 5, lines 4-7 discloses that the pressure is about 1 PSI ~

52 mm Hg) and the valve is used to establish and determine the rate and duration of air pulses (col. 5, lines 36-47).

12. Re claims 6-7, 16-17 and 19-20, Van Brunt discloses the apparatus being lightweight, relatively small, low cost and quiet, except for the exact weight of the apparatus. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to design the apparatus so that it can be weighted about 15 lbs or less, because by optimizing the weight of the apparatus such that it can be light-weight would allow the user to use more conveniently. One of ordinary skill in the art, furthermore, would have expected that the device would perform equally well with either designs because the weight feature does not affect the performance of chest compression. Therefore, it would have been an obvious matter of design choice to modify the apparatus of Van Brunt to obtain the invention as specified in the claims. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the weight of the apparatus such that it can be lightweight, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3764

14. Applicant's arguments filed on 7/10/2003 have been fully considered but they are not persuasive. Applicant stated that Van Brunt fails to show a rotating blade even though producing the same sinusoidal waveform pressure, the only difference between Van Brunt and the claimed invention is the details of the valve 30. Van Brunt gives examples of suitable valves but is not restricted to any one type as long as it provides a continuously variable range of air flow restriction between the fully close and open positions (col.5, lines 35-47). Whitney exemplifies another equivalent alternative valve for performing the same function and figure 5 shows a sinusoidal waveform as required by Van Brunt.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3764

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tringali et al. (4,197,837), Gorran (4,135,500) and Brueckner (4,311,135) all disclose an apparatus that has a valve comprising a rotatory member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D. Thanh whose telephone number is (703) 605-4354. The examiner can normally be reached on Monday-Thursday & alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Lucchesi can be reached on (703) 308-2698. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Quang D. Thanh  
Patent Examiner  
Art Unit 3764  
September 24, 2003

(QDT)

  
Danton D. DeMille  
Primary Examiner